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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,824	03/23/2004	Masatake Tamaru	04023/LH	3703

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EXAMINER

BELLINGER, JASON R

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,824	<b>Applicant(s)</b> TAMARU ET AL.	
	<b>Examiner</b> Jason R. Bellinger	<b>Art Unit</b> 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

1. Applicant's election without traverse of species I, drawn to Figures 1-4, in the reply filed on 15 September 2005 is acknowledged.
2. Claim 9 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 15 September 2005.

***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 31.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The abstract of the disclosure is objected to because it contains legal terms (see below). Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "comprises", "means", and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

6. Claim 8 is objected to because of the following informalities: The phrase "so disposed as" should be replaced with the term --disposed-- in line 4 for grammatical clarity. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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8. Claims 3 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 is indefinite due to the fact that the phrase "an oil line" in line 6 is a double recitation. This limitation has been previously set forth in line 4 of the claim. It is therefore unclear whether the "oil line" set forth in line 6 is the same as that set forth in line 4, or is an additional element of the invention.

9. Claim 3 recites the limitation "the pressure active area" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claims.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Bricknell. Bricknell shows a crawler track tension adjusting device having a hydraulic actuator 3-4 that operates in directions to increase and decrease the tension of a crawler belt 1 under the same conditions, an electric motor (namely solenoid control valves 35-36 and battery 40), and a hydraulic pump 23. An operating condition detecting means disposed in a circuit (namely switches 42-43) connects the pump 23 to

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the actuator 3-4, with the electric motor (35-36 & 40) is controlled according to a signal received from the operating condition detecting means 42-43.

The pump 23 includes an integrally formed tank, which may hold oil. The tension adjusting device is provided on both crawler units.

***Claim Rejections - 35 USC § 103***

**12.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**13.** Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bricknell in view of Latham. Bricknell does not specify that the actuator is a double rod cylinder.

In figure 1, Latham teaches the use of a hydraulic actuator formed as a double rod cylinder having a cylinder 20, a piston 22 slidable within the cylinder 20, and a piston rod with portions (28 & 30) located at the front and rear ends of the piston 22. The pressure active areas of the front and rear chambers (32 & 34) are equal. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tension system of Bricknell with a double rod cylinder actuator as a substitution of equivalent parts, dependent upon availability and cost.

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14. Claims 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bricknell in view of Latham as applied to claims 2-3 above, and further in view of Thomas.

Bricknell shows numerous valves (9-10, etc) disposed in the oil line 5 connecting the pump 23 to the actuator 3-4. Latham teaches the use a controller 40 that controls a motor 10 for actuating the actuator in a selected direction. A sensor 36 is disposed at an end of the piston rod 30 opposite to the end 28 which would face the yoke of the idler wheel (2 of Bricknell) to detect the position of the piston rod (28 & 30). The signal from the sensor 36 is input into a controller 40. It would have been obvious to one of ordinary skill in the art to provide the tension system of Bricknell with a stroke sensor to allow the control system and/or operator to know where the piston is located at a given moment.

Bricknell as modified by Latham does not show the valve being an electromagnetic valve. Thomas teaches the use of an electromagnetic valve 23 in a hydraulic system. The system is hermetically sealed in a casing 77.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the system of Bricknell with an electromagnetic valve, as a substitution of equivalent parts, dependent upon cost and availability. Furthermore, it would have been obvious to one of ordinary skill in the art to provide all of the elements of the hydraulic tensioning system of Bricknell as modified by Latham in a hermetically sealed casing, in order to prevent damage to any part of the system during operation, and to prevent any hydraulic fluid leaks from contaminating the environment.

***Conclusion***

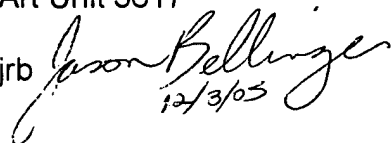
**15.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show hydraulic tension systems for tensioning a crawler track. For example, Hall shows a system of the type described above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger  
Examiner  
Art Unit 3617

jrb   
12/3/05